**PATENT** Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the

following remarks. Claims 1-20 are pending in the present application, of which claims 1, 7

and 13 are independent.

Claims 1-20 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by

Applicant's background ("the Background") and U.S. Patent No.6,075,938 to Bugnion et al.

("Bugnion").

Claim Rejection under 35 U.S.C. § 102

The test for determining if a reference anticipates a claim, for purposes of a rejection

under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed

combination, or the mechanical equivalents thereof functioning in substantially the same way

to produce substantially the same results. As noted by the Court of Appeals for the Federal

Circuit in Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co., 221

USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection

under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference

disclosure of each and every element of the claimed invention,

arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed

invention, then the cited reference fails to anticipate the claimed invention and, thus, the

claimed invention is distinguishable over the cited reference.

The Official Action sets forth a rejection of claims 1-20 under 35 USC 102 (a) as

allegedly being anticipated by the Background of the present application and the disclosure

6

**PATENT** Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

contained in Bugnion. This rejection is respectfully traversed for at least the following reasons.

Initially, it is respectfully submitted that the Background does not anticipate the subject matter of independent claim 1. More specifically, the Background does not disclose "multiple processors mounted on a single die; and multiple operating systems residing in a memory connected to said multiple processors," as recited in claim 1. Instead, the Background discloses a scheme including multiple processors on a single die and recites that Bugnion discloses multiple operating systems. Page 2, lines 1-23. However, these are two different approaches, and thus can not anticipate the invention of claim 1. Further, the Background goes on to say that Bugnion "fails to provide multiple physical processors, implemented in hardware, on a single die." Page 2, lines 20-21. The background further states, in referring to Bugnion, that "if this architecture were to support multiple physical processors, it would need space for providing multiple dies." Page 3, lines 1-2. Thus, claim 1 is not anticipated by the Background.

The Examiner switches between different approaches mentioned in the Background to reject claims 2-6. For example, the Examiner refers to Bugnion to reject claims 2, 5 and 6; Fig. 2 of the Application to reject claim 3; and Fig. 1 of the Application to reject claim 4. These represent three different approaches. For example, Bugnion discloses a layer of software between the hardware and operating system for scalable multiprocessor machines that "acts like a virtual machine monitor." Col. 4, lines 6-16. Fig. 2 shows a multiprocessing scheme including multiple processors on a single die, but connected to a single operating system 250. Background, page 2, lines 1-7. Fig. 1 shows a multiprocessing scheme "having

**PATENT** Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

multiple processors 10-40, each on a separate die (that is, chip) 50-80, and connected to a single operating system 90 stored in memory 95. Background, page 1, lines 19-22.

As discussed above, claim 1 is not anticipated by the Background. Thus, claims 2-6 are not anticipated by different approaches recited in the Background and Bugnion. For example, Bugnion does not disclose "multiple processors mounted on a single die," as recited in claim 1. Thus, claims 2, 5 and 6 are not anticipated by Bugnion. Fig. 2 does not disclose "operating systems residing in a memory connected to said multiple processors" (as recited in claim 1) since Fig. 2 shows a single operating system. Thus, claim 3 is not anticipated by Fig. 2. Further, Fig. 1 does not disclose "multiple processors mounted on a single die" (as recited in claim 1) since it shows multiple processors each on a separate die. Thus, claim 4 is not anticipated by Fig. 1.

Therefore, independent claim 1 and its dependent claims 2-6 are believed to be allowable over both the Background and Bugnion.

The Official Action does not specifically reject claims 7-20. However, neither the Background nor Bugnion discloses "a plurality of processor groups mounted on a single die; and multiple operating systems residing in a memory connected to said groups," as recited in claim 7 or "processor means for executing a plurality of operating system means, wherein said processor means includes a plurality of processors mounted on a single die" as recited in claim 13. Neither the Background nor Bugnion discloses the combination of multiple processors on a single die nor multiple operating systems connected to the multiple processors, as discussed above. Thus, neither the Background nor Bugnion discloses processor means for executing a plurality of operating system means, wherein the processor

**PATENT**Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

means includes a plurality of processors mounted on a single die. Therefore, neither the

Background nor Bugnion anticipates claim 13.

Further, because neither the Background nor Bugnion discloses multiple processors

on a single die in combination with multiple operating systems connected to the multiple

processors, neither the Background nor Bugnion discloses the combination of a plurality of

processor groups mounted on a single die and multiple operating systems residing in a

memory connected to those groups. Therefore, neither the Background nor Bugnion

anticipates claim 7.

Therefore, claims 7, 13 and their dependent claims 8-12 and 14-20 are believed to be

allowable over both the Background and Bugnion. Although Applicants believe that neither

the Background nor Bugnion disclose the features of dependent claims 8-12 and 14-20,

Applicants respectfully reserve the right to pursue such arguments at a later date.

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this

application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would

assist in resolving any issues pertaining to the allowability of the above-identified

9

PATENT Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

Timothy Kang Reg. No. 46, 423

application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Stephen E. RICHARDSON et al.

Dated: July 16, 2004

 $\mathbf{B}\mathbf{y}$ 

Ashok Mannava Registration No.45,301

MANNAVA & KANG, P.C. 281 Murtha Street Alexandria, VA 22304 (703) 628-1461 (703) 991-1162 (facsimile)